

ABSTRACT OF THE DISCLOSURE

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METHOD AND SYSTEM**USING HARDWARE ASSISTANCE FOR INSTRUCTION TRACING
BY REVEALING EXECUTED OPCODE OR INSTRUCTION**

10 A method, system, apparatus, and computer program
product is presented for assisting instruction tracing
operations. A mechanism is provided within the processor
for revealing the most recently executed instruction.
After the instruction is completed, the opcode of the
15 instruction or the entire instruction is revealed in one
of a variety of manners, such as by writing the opcode or
instruction to a register that may be read by
application-level code. Alternatively, a series of
instructions may be stored in a trace buffer within the
20 processor upon the completion of each instruction. In
another alternative, the size and address of a trace
buffer in memory may be placed into configuration
registers, and a series of instructions may be stored in
the trace buffer after the completion of each
25 instruction. The tracing operation for the series of
instructions may be qualified so that it is performed
only in a taken-branch tracing mode.